CHOREA IN THE AGED—THE REPORT OF A CASE.*

By FRANK R. FRY, A.M., M.D.,

St. Louis.

Professor of Diseases of the Nervous System, St. Louis Medical College.

CHOREA is rarely met with in adults, especially in persons over twenty-five or thirty years of age. Rare cases occurring in old persons have been remarked from time to time with much interest.

Before presenting my notes of a case of simple chorea in a woman 69 years of age, permit me briefly to mention, without attempting to discuss at any length, the leading features of chorea in the adult and the aged.

Very apparently these cases demand to be arranged in several groups or classes. To begin with, there is the class to which the case I am about to report belongs; cases of what may be called simple chorea, differing in no essential particular from the disease as seen in young subjects. In this form the disease is curable, or at all events, lasts a comparatively short time. It is unaccompanied by evidences of coarse lesions of the central nervous system, and is not hereditary in the proper sense of the word. Such cases are very rare.

In another class of cases the chorea is accompanied by symptoms, appearing sooner or later, which reveal the presence of coarse cerebral lesions. The question has been raised upon the propriety of calling the choreic movements which appear in the course of such cerebral disease by the name chorea. I shall not stop to discuss it here, but simply observe that often the movements are in themselves indistinguishable from so-called simple chorea, and that the name has been habitually applied to them by prominent

* Read before the Missouri State Medical Association, May 20, 1891.

writers for many years. This class of cases has been divided into two sub-groups, according as the cerebral lesions are sub-cortical or cortical. Sometimes it is practicable, and to the neurologist especially, of much diagnostic interest, to make the distinction.

There is another form of chorea with which aged persons are occasionally found afflicted. I refer to the malady now generally known in neurological literature as chronic hereditary chorea, a disease of such striking character that I shall not attempt to describe it here at any length, but refer you to Dr. Wharton Sinkler's article in Vol. V. of Pepper's System of Medicine, where are collected the accounts of it from various sources which have established its identity as a peculiar and wonderfully interesting affection. So far as the movements are concerned, they are often those of ordinary chorea. It appears in a marked hereditary manner in certain families. The subjects of it are rarely attacked until toward the middle of life. They never recover, and they frequently become insane. In some instances they live to old age; hence I merely mention it as one of the forms of chorea which may be found in old subjects.

Mrs. Bernhardt Metzger, aged 69 years and eight months, in humble but comfortable circumstances, living at 808 Geyer Avenue, St. Louis, I first examined February 1, 1891. She was affected with a chorea so characteristic as to be diagnosticated such at a glance. The muscles of the right side of the body only were involved—a right hemichorea. The face, tongue, neck, upper and lower extremities were markedly involved; the muscles of the trunk, including those of respiration, only slightly. When sitting or lying, the whole lower extremity was thrown hither and thither with much force. She constantly held the right wrist in the opposite hand, thereby restraining to some extent the movements; when it was disengaged, however, the movements were about as severe as those of the lower extremity. The back of the wrist and hand were quite sore from sharp raps against hard objects received in consequence of the excessive and uncontrollable muscular action. Speech was indistinct on account of the involvement of the lips and tongue. There was a marked hebetude, an inability to appreciate the force of questions asked her,

and an indifferent manner in answering them. However, she complained of feeling very weak, of dizziness when she raised her head, and pain in the top of it. The members of the family informed me that during the past few nights she had been slightly delirious, and even to some extent during the daytime; that she was sleeping very poorly, and getting but little rest night or day. The pulse was 110, feeble, irregular and intermitting, three or four times a minute. The temperature in the axilla was 102° F. She had a rather acute coryza and a troublesome cough. I found that these more acute symptoms had appeared four days ago and had abated none since. As nearly as could be determined, the choreic movements had begun at least two weeks prior to this time. The first evidence of them was a slight "nervousness" in the right hand; this constantly increased in severity, gradually extending to the other parts involved, and was now as severe as it had ever been. I was informed by the son and daughter, both of whom lived in the family with her, that for several weeks prior to the appearance of the chorea she had been in poor health, complaining of general weakness, of dizziness and headache. She had also become very irritable and notional, quite unlike herself. They had felt considerable anxiety about her condition, and had called a physician, who had visited her several times.

I came to the conclusion that besides the chorea the patient was suffering an attack of epidemic influenza, or la grippe, then prevalent in the community. In the presence of the acute attack of this latter disease, I felt it impossible to determine whether there was important cerebral trouble. I prescribed phenacetine and a dose or two of bromide at night, and made arrangements for the methodic administration of nourishment and stimulants.

Feb. 5th. The patient had been kept in bed since my first visit. (Prior to then she had been frequently up, trying to walk about and to sit in a chair.) The temperature was normal, the pulse slower and stronger, the mental and general condition much better. She had obtained a fair amount of sleep and rest. The choreic movements were somewhat less severe. I began the administration of Fowler's solution in three-drop doses, to be gradually increased, prescribed a laxative, and continued the bromide at night.

Feb. 12th. Patient taking six drops of the Fowler's solution t. i. d. Still improving. A dynamometric test showed the grip of the right hand to be about ten per cent. less than that of the left. There were also evidences of

lessened muscular power in the lower extremity of the same side.

Feb. 20. The patient has been taking eight drops of Fowler's solution for the past three days. She bears the remedy well, and is still improving. Marked abatement of the chorea.

March 2. Much improved in all respects. Choreic movements slight. Has been taking eight drops of Fowler's solution since Feb. 17th, or for about two weeks. Dose reduced to four drops. Prescribed iron and strychnine in small doses.

March 16. No trace of choreic movement. Discontinued the arsenic. (The chorea had existed for about seven weeks.)

April 15. The patient and members of the family agree that she is in better health and spirits than she has been for many months past. Appetite and strength are good, and she is sleeping well. Examination by the dynamometer showed the grip of the right hand about four per cent. better than that of the left. The heart intermits from two to three times in two minutes. There is no murmur; none was detected at any time during the attack.

At this date I renewed my inquiries into the personal and family history. Although never very robust, she had not had a severe illness since childhood. She had never had an attack of chorea previously, nor anything similar to it. She had never had an attack of rheumatism, although of late years she had occasionally had slight aches and pains in some of the joints, especially the shoulders, and in the muscles of the extremities. The family history is unimportant so far as obtained. I could get no account of a case of chorea or other pronounced neuropathic trouble in any of her blood relations of whom she had any knowledge. However, I have had under treatment her son, who is a neurasthenic of a type generally found in families with a neuropathic tendency.

REMARKS.—The practical difference between the class of cases to which this one belongs, and the other forms mentioned above, is that the former recover, and the latter do not; hence the interest attaching to the diagnosis. In this case the similarity of the attack to those commonly observed in young subjects is remarkable in several respects: a prodromal stage of general disturbance to health, with mental irritability; a gradual onset of the movements; a

rapid improvement and complete recovery within a few weeks with the administration of arsenic; a paresis of the involved parts, not infrequently to be found in cases of ordinary chorea when carefully examined. Yet the occurrence of these symptoms in an old person should lead one to hesitate in reaching a conclusion. It is true that the chorea found in adult and old subjects with a hemiplegia generally follows the paralysis, but the fact that it sometimes precedes the paralysis is a matter of record; *i.e.*, there are recorded cases where in post-mortem examination there have been found gross subcortical lesions (patches of softening in the vicinity of the motor portion of the internal capsule) which had produced a hemiplegia, the hemiplegia having been preceded by a hemi-chorea. It is also a fact that persisting hemi-chorea, the result of such gross lesions, has been found to exist in the absence of a hemiplegia. With these facts in mind, it is apparent that the discovery of a hemiparesis in our case tended to obscure the diagnosis until both the paralysis and chorea had disappeared, or, at least, until they were rapidly disappearing.